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Cathi H. Turner  
Cathi H. Turner  
Date of Signature November 15, 2004

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Dace et al.

Group Art Unit: 1639

Serial No.: 09/879,279

Examiner: Epperson, Jon D.

Filed: June 12, 2001

Docket No.: 1392/18/2

Confirmation No.: 3524

For: IN VITRO CAPTURE OF NUCLEIC ACIDS VIA MODIFIED  
OLIGONUCLEOTIDES AND MAGNETIC BEADS

\*\*\*\*\*

DECLARATION PURSUANT TO 37 C.F.R. § 1.131

Commissioner for Patents  
Washington, D.C. 20231

Sir:

1. I, Gayle Dace, am a co-inventor of the invention disclosed and claimed in the subject above captioned U.S. Patent Application Serial No. 09/879,279.
2. I have had the opportunity to review the Official Action mailed on July 13, 2004 from the U.S. Patent and Trademark Office for the above-referenced U.S. patent application.
3. I have also reviewed the following documents cited by the United States Patent and Trademark Office in the Official Action mailed on July 13, 2004:

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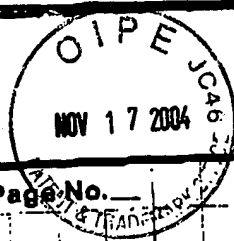
Serial No.: 09/879,279

- (a) U.S. Published Patent Application No. 2003/0077609 A1 (the '609 application), claiming priority to U.S. Provisional Patent Application No. 60/278,598; and
  - (b) U.S. Provisional Patent Application No. 60/278,598 (the '598 Application).
4. The invention embodied in claims 1-8, 11-24 and 31 of the subject U.S. patent application was invented prior to the earliest claimed priority date of March 25, 2001 of the '609 and '598 applications.
5. Attached hereto as **Exhibit A** is a true and accurate copy of consecutively numbered laboratory notebook pages documenting experiments performed involving the subject matter embodied in the pending claims, which pages are signed by me and a witness. Exhibit A provides evidence of the subject matter recited in the pending claims and predates the earliest claimed priority date of March 25, 2001 of the '609 and '598 applications.

I hereby declare that all statements herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 10/13/04

By: Gayle Dace, M.S.  
Gayle Dace, M.S.



Project No. \_\_\_\_\_

Book No. \_\_\_\_\_

TITLE new LNA oligos

om Page No. \_\_\_\_\_

Sample ID	Net Abs 230.0nm	Net Abs 260.0nm	Net Abs 280.0nm	260.0/230.0	260.0/280.0	Dil Fact.	Conc.
TORREY1	0.1416	0.4132	0.2326	2.91867	1.77598	1.0000	413.1621
2	0.1436	0.4207	0.2366	2.93037	1.77819	1.0000	420.7299
TORREY2	0.0381	0.1470	0.0560	3.86056	2.62547	1.0000	146.9856
4	0.0457	0.1498	0.0586	3.27741	2.55746	1.0000	149.8367

IDO Number (Oligo ID)	Sequence	ODs (260 nm)	Anion Exchange Chromatography Results	Other Information
3985 Torrey-1	5'-BIOTIN-dGTT dGTT dGTT dGTT -3'	11.5	94.1 % 22 + 64-69% base	56°C - 85°C
3986 Torrey-2	5'-BIOTIN-GTG TGT GTG TGT-3'	3.5 oligo 5 36	96.1 % Tm + 3-8% base	72°C - 80°C

1.8ul 1 µg non-linear tomato DNA  
 26.5 ng Oligo Torrey 2  
 Buffer F

1.8ul 1 µg linear tomato DNA  
 26.5 ng Oligo 2  
 Buffer F

80°C / 45 min

1 µg non-linear tomato DNA  
 75 ng oligo 2  
 Buffer C

1 µg linear tomato library  
 75 ng Torrey 2  
 Buffer C

To Page N. \_\_\_\_\_

Witnessed & Understood by me, GR - 100

Date \_\_\_\_\_

Invented by Hayden

Date \_\_\_\_\_

Recorded by \_\_\_\_\_

LNA capture that worked

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FNFL

NOV 17 2006

2.5  $\mu$ l non-lin Tom library1.8  $\mu$ l Torrey 2 LNA45.7  $\mu$ l Buffer F50  $\mu$ l

few colonies

3  $\mu$ l linear library1.8  $\mu$ l45.2  $\mu$ l50  $\mu$ l

no colonies

CNCL76.4 ng  
50  $\mu$ l2.5  $\mu$ l non-lin Tomato lib2.6  $\mu$ l Torrey 2 LNA (1:5 dil)54.9  $\mu$ l Buffer C60  $\mu$ l3  $\mu$ l

lin library

2.6  $\mu$ l54.4  $\mu$ l60  $\mu$ l

no colonies

80°C for 30 min

90°C in 150  $\mu$ l Buffer E - 20 minEtOH ~~out~~ (with 10  $\mu$ l H<sub>2</sub>O)  
bring up in 100  $\mu$ l TE

purify with PCR kit

WORKED

T2NCO1 plate

complete protocol on p. 150

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Read &amp; Understood by me,

B. Burke

Date

Invented by

Daryl J. Jara

Recorded by

Date

B. Burke

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